### PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)

(PCT Rule 44bis.1(c))

To:

- E P - TR

TERRY, Kathleen, R. 13840 Johnson St. NE Ham Lake, MN 55304 ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year)
27 July 2006 (27.07.2006)

Applicant's or agent's file reference

BEN, 024-PCT

International application No. PCT/US2005/001435

International filing date (day/month/year) 14 January 2005 (14.01.2005) Priority date (day/month/year)
14 January 2004 (14.01.2004)

**IMPORTANT NOTICE** 

Applicant

BIOENERGY, INC. et al

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

Nora Lindner

Facsimile No. +41 22 338 82 70

e-mail: pt02@wipo.int

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference	FOR FURTHER ACTION	See item 4 below		
International application No. PCT/US2005/001435	International filing date (day/month/year) 14 January 2005 (14.01.2005)	Priority date (day/month/year) 14 January 2004 (14.01.2004)		
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237				
Applicant BIOENERGY, INC.				

•						
1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).					
2.	This REPORT consists of a total of 4 sheets, including this cover sheet.					
	In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.					
3.	This report contains indications relating to the following items:					
	Box No. I	Basis of the report				
	Box No. II	Priority				
	Box No. III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability					
	Box No. IV	Lack of unity of invention				
	Box No. V	Box No. V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
	Box No. VI Certain documents cited					
12	Box No. VII Certain defects in the international application					
	Box No. VIII Certain observations on the international application					
4.	<ol> <li>The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).</li> </ol>					
-		-				
	•		Date of issuance of this report 17 July 2006 (17.07.2006)			
	The International Burea 34, chemin des Colo 1211 Geneva 20, Sw	mbettes	Authorized officer  Nora Lindner			
Facsimile No. +41 22 338 82 70			e-mail: pt02@wipo.int			

Form PCT/IB/373 (January 2004)

om the ITERNATIONAL SEARCHING AUTHOR	ПУ	•	•	REC'D 22 AUG	2005
TO: KATHLEEN R. TERRY			PCT:	WIPO	PC
KATHLEEN K. TERRY 13840 JOHNSON ST. NE HAM LAKE, MN 55304		WRI INTERNATIO	TTEN OPINION NAL SEARCHII	OF THE . NG AUTHORITY	
			(PCT Rule 43bi		
	• .	Date of mailing (day/month/year)	184	UG 2005	
Applicant's or agent's file reference		FOR FURTHER	See paragraph 2 belo	_	
International application No.	International filing date	(day/month/year)	Priority date (day/n		
	14 January 2005 (14.01.	2005)	14 January 2004 (1	4.01.2004)	$\dashv$
International Patent Classification (IPC) or	both national classificat	non and n C		·	
IPC(7): A61K 31/70; C07H 3/02 and US C Applicant	1: 514/23; 538/1.11				
BIOENERGY, INC.		•			=
This opinion contains indications relations	ting to the following iter	ns:	•		Ì
5-7			-	·	
	opiaca				
Box No. II Priority  Box No. III Non-establi	shment of opinion with a	regard to novelty, inve	entive step and indust	rial applicability	
Der No IV Jack of uni	ty of invention .				`.
	statement under Rule 43b y, citations and explanat	ois.1(a)(i) with regard ions supporting such	to novelty, inventive statement	step or industrial	
	cuments cited				1
	fects in the international			•	
Box No. VIII Certain ob	servations on the interna-	tional application	•		
2. FURTHER ACTION  If a demand for international preliminary Examini Authority other than this one to be that written opinions of this International President Authority other than this one to be that written opinions of this International President Authority of the International Pre	the IPEA and the chost tional Searching Authori	en IPEA has notified ity will not be so cons	the International Buildered.	is invited to submit to	o the
If this opinion is, as provided abo IPEA a written reply together, who of Form PCT/ISA/220 or before the	e expiration of 22 month	written opinion of the endments, before the as from the priority da	expiration of 3 months, whichever expires	hs from the date of me later.	iling
For further options, see Form PCT	/ISA/220.				
3. For further details, see notes to For	rm PCT/ISA/220.	•		int	<i>f</i>

Michael C. Henry

Telephone No. 703 308-1235

Name and mailing address of the ISA/ US

Mail Stop FCT, Attn: ISA/US

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Form PCT/ISA/237 (cover sheet) (January 2004)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US05/01435

Box No. I Basis of this opinion					
1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.					
This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).					
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:					
a. type of material					
a sequence listing					
table(s) related to the sequence listing					
b. format of material					
in written format					
in computer readable form					
c. time of filing/fornishing					
contained in international application as filed.					
filed together with the international application in computer readable form.					
furnished subsequently to this Authority for the purposes of search.					
3. In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.					
4. Additional comments:					

Form PCT/ISA/237(Box No. I) (January 2004)

International application No. PCT/US05/01435

INTERNATIONAL SEARCHING	AUTHORITY	FC1/050301455
Box No. V Reasoned statement under Rule 4 applicability; citations and explan	3 bis.1(a)(i) with rega	rd to novelty, inventive step or industrial
1. Statement		
	Claima P	YES
Novelty (N)	Claims 8	NO
·	Cmints <u>1717-22</u>	
Inventive step (IS)	Claims 8	YES
	Claims 1-7, 9-11	NO
	- 8 - Y	YES
Industrial applicability (IA)	Claims 1-11	NO
	Claims NONE	
2. Citations and explanations:		1
Claim 8 meets the criteria set out in PCT Article 33( recovery from sepsis comprising the administration	2)-(3), because the prior a of D-ribose to a mammal :	rt does not teach or fairly suggest a method for enhancing suffering from sepsis.
intravenous administration comprising substantially composition further comprising D-glucose and spec composition of claims 9-10 comprising 5% D-ribose Claims 1-7 lack an inventive step under PCT Article reducing recovery time of a manmal undergoing ge a mammal. Claims 2-7 are drawn to specific routes ribose. ST. CYR et al. disclose a method of treating mammals an effective amount of ribose (see abstract transient hypoxia from anesthesia can be treated with hypoxia frequently occurs in individuals undergoing ribose to an individual (which includes a mammal) said individual undergoing the anesthesia. It should the recovery time of the individual undergoing the recover in less time than if the patient was not treat	pure, pytogen-free D-thou infic percentages (%) of rib- in 5% D-glucose (see co- e 33(3) as being obvious oneral anesthesia comprisi- of administration of said of the hypoxia and the symptor and claims). In addition the said ribose (see abstract ganesthesia (col.2, lines) undergoing anesthesia to to the noted that the examinations the said the said to the transient hypoxi-	It 14, example 7, lines 4-48).  It 14, example 7, lines 4-48).  It is drawn to a method of an effective amount of D-ribose to ribose, the administration of specific amounts and doses of an of hypoxia in mammals by administering to the answer of hypoxia in mammals by administering to the answer of hypoxia in mammals experiencing by Furthermore, ST. CYR et al. disclose that transient that 30-33). Therefore, it is obvious to administer theat transient hypoxia thus reducing recovery time of the er considers the treating of transient hypoxia a reducing of reating of the transient hypoxia would cause the patient to
	•	
		·
		3
	•	
		•
l l	•	

## PATENT COOPERATION TREATY

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference	FOR FURTHER ACTION	See item 4 below		
International application No. International filing date (day/month/year) Priority date (day/month/year) PCT/US2005/001435 International filing date (day/month/year) 14 January 2005 (14.01.2005) 14 January 2004 (14.01.2004)				
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237				
Applicant BIOENERGY, INC.				

			<u> </u>		
1.	1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).				
2.	2. This REPORT consists of a total of 4 sheets, including this cover sheet.				
	In the attached sheets, any referent to the international preliminary re	ce to the written opinion of t port on patentability (Chapte	he International Searching Authority should be read as a reference r I) instead.		
3.	This report contains indications re	elating to the following items	:		
	Box No. I Basis of the report				
	Box No. II	Priority			
	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability			
	Box No. IV	Lack of unity of invention			
	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
	Box No. VI	Certain documents cited			
	Box No. VII	Certain defects in the international application			
	Box No. VIII	Certain observations on the international application			
4.	4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis.2).				
			Date of issuance of this report 17 July 2006 (17.07.2006)		
The International Bureau of WIPO 34, chemin des Colombettes		mbettes	Authorized officer  Nora Lindner		
1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70			e-mail: pt02@wipo.int		

Form PCT/IB/373 (January 2004)

## PATENT COOPERATION TREATY

REC'D 2 2 AUG 2005 INTERNATIONAL SEARCHING AUTHORITY PCT WIPO KATHLEEN R. TERRY 13840 JOHNSON ST. NE WRITTEN OPINION OF THE HAM LAKE, MN 55304 INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) 8 AUG 2005 Date of mailing (day/month/year) FOR FURTHER ACTION Applicant's or agent's file reference See paragraph 2 below Priority date (day/month/year) International filing date (day/month/year) International application No. 14 January 2004 (14.01.2004) 14 January 2005 (14.01.2005) PCT/US05/01435 International Patent Classification (IPC) or both national classification and IPC IPC(7): A61K 31/70; C07H 3/02 and US C1: 514/23; 536/1.11 Applicant BIOENERGY, INC. 1. This opinion contains indications relating to the following items: Basis of the opinion Box No. I Priority Box No. II Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Box No. III Lack of unity of invention Box No. IV Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial Box No. V applicability; citations and explanations supporting such statement Certain documents cited Box No. VI Certain defects in the international application Box No. VII Certain observations on the international application Box No. VIII If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the 2, FURTHER ACTION International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an International Preliminary Examining Authority (IFEA) eacept that this does not apply whate the applicant encodes an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. 3. For further details, see notes to Form PCT/ISA/220. Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Michael C. Henry Commissioner for Patents P.O. Box 1450
Alexandria, Virginia 22313-1450
Facsimile No. (703) 305-3230 Telephone No. 703 308-1235

Form PCT/ISA/237 (cover sheet) (January 2004)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US05/01435

Box No. I Basis of this opinion					
1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.  This opinion has been established on the basis of a translation from the original language into the following language,					
which is the language of a translation furnished for the purposes of international search water Rules	123 412 20.1(0))				
<ol><li>With regard to any nucleotide and/or amino acid sequence disclosed in the international application and n invention, this opinion has been established on the basis of:</li></ol>	ecessary to the claimed				
a. type of material					
a sequence listing					
table(s) related to the sequence listing					
b. format of material					
in written format					
in computer readable form					
c. time of filing/furnishing					
contained in international application as filed.					
filed together with the international application in computer readable form.					
furnished subsequently to this Authority for the purposes of search.					
	·				
3. In addition, in the case that more than one version or copy of a sequence listing and/or table relation or furnished, the required statements that the information in the subsequent or additional copies application as filed or does not go beyond the application as filed, as appropriate, were furnished.	ing thereto has been filed is identical to that in the				
formished the required statements that the information in the subsequent of additional copies	ing thereto has been filed is identical to that in the				
or furnished, the required statements that the information in the subsequent or admittonal copies application as filed or does not go beyond the application as filed, as appropriate, were furnished.	ing thereto has been filed is identical to that in the				
or furnished, the required statements that the information in the subsequent or admittonal copies application as filed or does not go beyond the application as filed, as appropriate, were furnished.	ing thereto has been filed is identical to that in the				
or furnished, the required statements that the information in the subsequent or admittonal copies application as filed or does not go beyond the application as filed, as appropriate, were furnished.	ing thereto has been filed is identical to that in the				
or furnished, the required statements that the information in the subsequent or admittonal copies application as filed or does not go beyond the application as filed, as appropriate, were furnished.	ing thereto has been filed is identical to that in the				
or furnished, the required statements that the information in the subsequent or admittonal copies application as filed or does not go beyond the application as filed, as appropriate, were furnished.	ing thereto has been filed is identical to that in the				
or furnished, the required statements that the information in the subsequent or admittonal copies application as filed or does not go beyond the application as filed, as appropriate, were furnished.	ing thereto has been filed is identical to that in the				
or furnished, the required statements that the information in the subsequent or admittonal copies application as filed or does not go beyond the application as filed, as appropriate, were furnished.	ing thereto has been filed is identical to that in the				
or furnished, the required statements that the information in the subsequent or admittonal copies application as filed or does not go beyond the application as filed, as appropriate, were furnished.					
or furnished, the required statements that the information in the subsequent or administrative application as filed or does not go beyond the application as filed, as appropriate, were furnished.  4. Additional comments:					
or furnished, the required statements that the information in the subsequent or administrative application as filed or does not go beyond the application as filed, as appropriate, were furnished.  4. Additional comments:					

International application No.

WRITTEN OPINION OF T INTERNATIONAL SEARCHING A		PCT/US05/01435	- n1
Box No. V Reasoned statement under Rule 43 applicability; citations and explana	3 bis.1(a)(i) with reg ations supporting s	ard to novelty, invent uch statement	ive step or industrial
1. Statement			·
Name It of AD	Claims 8		YESYES
Novelty (N)	Claims 1-7, 9-1	1	NO
		5.	
Inventive step (IS)	Claims 8		YES NO
1.0	Claims <u>1-7, 9-1</u>	1	·
Industrial applicability (IA)	Claims 1-11		YES
industrial applicationty (123)	Claims NONE		NO
2. Citations and explanations:			•
grand and any in DCT Article 33/2	2)-(3), because the prior	art does not teach or fairl	y suggest a method for enhancing
recovery from sepsis comprising the administration of	1 D-1100se to a manning		
Claim 9-11 lack novelty under PCT Article 33(2) as t intravenous administration comprising substantially recomposition further comprising D-glucose and specific composition of claims 9-10 comprising 5% D-ribose	Fig. percentages (%) of i	ribose and glucose. ST. C	YR et al. disclose applicant's
Claims 1-7 lack an inventive step under PCT Article reducing recovery time of a mammal undergoing gen a mammal. Claims 2-7 are drawn to specific routes or ribose. ST. CYR et al. disclose a method of treating mammals an effective amount of ribose (see abstract transient hypoxia from anesthesia can be treated with hypoxia frequently occurs in individuals undergoing ribose to an individual (which includes a mammal) usaid individual undergoing the anesthesia. It should the recovery time of the individual undergoing the arecover in less time than if the patient was not treate	33(3) as being obvious neral anesthesia compriof administration of sai hypoxia and the sympt and claims). In addition is said ribose (see abstrate andergoing anesthesia to be noted that the examinesthesia, since the said of or the transient hypoxia.	s over ST. CYR et al. Classing the administration of id ribose, the administration on on ST. CYR et al. disclosure act). Furthermore, ST. CYs 57-10 and 30-33). Therefore treat transient hypoxia trainer considers the treating differential of the transient loxia with ribose.	im 1 is drawn to a method of an effective amount of D-ribose to on of specific amounts and doses of als by administering to the et hat mammals experiencing ?R et al. disclose that transient ore, it is obvious to administer hus reducing recovery time of the g of transient hypoxia a reducing of hypoxia would cause the patient to
Claims 1-11 the criteria set out in PCT Article 33(4) made or used in industry.	, and thus have industr	iat abbucanity occurse a	10 Subject 22.101 02.22
	• .	. *	
		•	
	•		
	•	<b>.</b>	
•		•	
		•	
· ·	•		
	•		